

Claims

1. Method for controlling an internal combustion engine comprising a manifold (12) from which an intake tube (13)

5 extends to an intake of a cylinder (Z1 to Z4) of the internal combustion engine, a gas inlet valve (30) which is disposed at the intake of the cylinder (Z1 to Z4), an intermittent charge valve (18) which is disposed upstream of the gas inlet valve (30) in the intake tube (13) and which releases or closes the intake tube (13) depending on its switching position (S), and an injection valve (34) for metering fuel, characterized in that

the temporal position of the duration of injection of the fuel is adjusted depending on a point in time at which the switching 15 position (S) of the intermittent charge valve (18) is changed.

2. Method according to claim 1,

characterized in that

the temporal position of the duration of injection of the fuel 20 is selected such that the velocity of flow of the air reaches its maximum during the injection period.

3. Method according to any one of the preceding claims,

characterized in that

25 the point of time at which the intermittent charge valve (18) is guided to its open position (OP) during the intake stroke is chosen such that the flow velocity of the air reaches a predetermined value.

30 4. Method according to any one of the preceding claims,

characterized in that

the point of time at which the intermittent charge valve (18) is guided to its closed position (CL) from its open position

(OP) during the intake stroke is chosen such that the flow velocity of the air reaches a predetermined value in the subsequent intake stroke.

5 5. Method according to any one of the preceding claims,
characterized in that
the temporal position of the duration of injection of the fuel
is adjusted only in a warm-up operating state (BZ) of the
internal combustion engine, depending on a point in time at
10 which the switching position (S) of the intermittent charge
valve (18) is changed.

6. Method according to claim 5,
characterized in that

15 the warm-up (WL) operating state (BZ) is adopted when a coolant
temperature (TCO) and/or an oil temperature (TOIL) are less
than predetermined threshold values and/or the time since the
start-up of the internal combustion engine is less than a
predetermined further threshold value.

20 7. Device for controlling an internal combustion engine
comprising a manifold (12) from which an intake tube (13)
extends to an intake of a cylinder (Z1 to Z4) of the internal
combustion engine, a gas inlet valve (30) which is disposed at
25 the intake of the cylinder (Z1 to Z4), an intermittent charge
valve (18) which is disposed upstream of the gas inlet valve
(30) in the intake tube (13) and which releases or closes the
intake tube (13) depending on its switching position (S), and
an injection valve (34) for metering fuel,
30 characterized in that means are provided which adjust the
temporal position of the duration of injection of the fuel
depending on a point in time at which the switching position
(S) of the intermittent charge valve (18) is changed.